



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,159	07/17/2003	Thomas R. Headley	010355-9137	1908
23409	7590	09/26/2005	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			HEWITT, JAMES M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/622,159	HEADLEY, THOMAS R.
	Examiner James M. Hewitt	Art Unit 3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 July 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3, 5-18, 20 and 21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3, 5-18 and 20-21 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 July 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Drawings

The drawings were received on 7/11/05. These drawings are acceptable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-9, 12-13, 16 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Confer et al (US 3,742,995) in view of Jones (US 4,664,958), and further in view of Boaz et al (US 6,022,504).

With respect to claims 1 and 12, Confer et al discloses a method of manufacturing a flow connector, comprising: providing at least one insert (20), the insert having a threaded bore for attachment to a threaded flow conduit (see at least col. 1 lines 12-17), and molding onto the at least one insert a composition comprising at least one polymer (thermoplastic) to form a manifold having a wall thickness defining an internal cavity and comprising a plurality of flow openings comprising at least one aperture defined by the at least one insert through the wall thickness. Confer et al fails to teach that the insert is polymeric and comprises a reinforcement material selected from the group consisting of fiberglass, an inert material and combinations thereof.

Confer et al rather discloses that his inserts are metal. Jones, however, in col. 2 lines 6-20, teaches a similar device having a flow opening and utilizing an insert that may be either a polymer or a metal. In view of Jones' teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a polymeric insert instead of a metal insert in Confer et al in order to provide a greater margin of safety against leakage (see Jones, col. 2 lines 18-20). Boaz et al teaches an insert that may be made from glass-filled nylon or glass-filled polypropylene. In view of Boaz et al's teaching and that Jones states that his insert could be about any material (see Jones, col. 2 ll. 7-10), it would have been obvious to one having ordinary skill in the art at the time the invention was made to form Confer et al's insert from glass-filled nylon or glass-filled polypropylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 2, wherein the at least one polymer of the at least one insert is the same as the at least one polymer of the flow connector. Refer to col. 2 lines 7-20 in Jones.

With respect to claim 3, wherein the at least one polymer of the at least one insert and the at least one polymer of the flow connector are similar polymers that permit remelting and subsequent bonding at the interface between the at least one insert and the flow connector. Refer to col. 2 lines 7-20 in Jones.

With respect to claim 5, it should be understood that the glass fibers would be uniformly dispersed throughout the plastic, and thus would be oriented circumferentially about the insert.

With respect to claims 6 and 13, Confer et al's device is a manifold body. Regarding the limitation "for a fluid handling pump", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

With respect to claims 7 and 21, wherein the at least one aperture is one of an inlet and an outlet opening in the manifold body.

With respect to claim 8, Confer et al employs blow-molding to form his device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to instead form the device by injection-molding since injection-molding is commonly known and practiced.

With respect to claim 9, Confer et al employs core pin inside the mold. This is also a common practice.

With respect to claim 16, refer to the above rejection of claim 1.

With respect to claim 20, it should be understood that the glass fibers would be uniformly dispersed throughout the plastic, and thus would be oriented circumferentially about the insert.

Claims 10-11, 14-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Confer et al (US 3,742,995) in view of Jones (US 4,664,958), and further in view of Boaz et al (US 6,022,504) as applied above, and still further in view of Yoshida et al (US 6,517,761).

With respect to claims 10-11, 14-15 and 17-18, Confer et al fails to teach that his insert includes circumferential grooves or spurs located on an exterior surface of the insert. Confer et al however does teach forming an annular groove and an outwardly extending flange on the exterior surface of the insert to assist in securing the insert. Yoshida teaches an insert for embedding in a base made of thermoplastic resin. The insert includes circumferential grooves and/or spurs on the exterior surface thereof for securing the insert in the base. In view of Yoshida's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Confer et al with circumferential grooves or spurs on the outer surface of his insert in order to better retain and secure the insert within the wall of the drum.

Response to Arguments

Applicant's arguments filed 7/11/05 have been fully considered but they are not persuasive.

Regarding the noted discussion of the published application, applicant states "Applicant understands that the Patent Office will correct its errors when and if the present application issues as a patent." Applicant seems to imply that his conclusion came as a result of his discussion with the examiner. This is not the case. The

examiner never informed Applicant that such would occur. Applicant was rather told to contact another branch of the office (e.g. Office of Patent Publication, Office of Petitions) for proper course of action.

Regarding the claim rejections under 35 USC 103(a), applicant's argues that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the teachings of Confer et al with the teachings of Jones is found in Jones. Confer et al and Jones are both hollow plastic containers having threaded inserts therein. Confer et al employs a metal insert. Jones states that his insert may be plastic or metal. Jones states "The body of the insert could be any material. If made of material that melts at the same temperature as high density polyethylene, the drum wall and insert will be welded and bonded together...an insert that weld or bonds with the drum material gives a greater margin of safety against leakage." Confer et al's container is made of a high density polyethylene, and thus from Jones' teaching, using a plastic insert that melts at the same temperature as high density polyethylene would provide a greater margin of safety against leakage (see Jones, col. 2 lines 18-20). Regarding the motivation to combine Confer et al and Jones with the teachings of Boaz et al, Boaz et al teaches the idea of employing a glass-filled

hard plastic insert. Boaz et al employs a glass-impregnated plastic in order to strengthen the plastic, as should be understood. And in view of Boaz et al's teaching of using a reinforced plastic and that Jones states that his insert could be about any material (see Jones, col. 2 ll. 7-10), it would have been obvious to form Confer et al's insert from glass-filled nylon or glass-filled polypropylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Regarding the motivation to combine Confer et al, Jones and Boaz et al with the teachings of Yoshida, like Confer et al and Jones, Yoshida employs an insert embedded within a thermoplastic. Yoshida however, employs grooves and spurs on the exterior surface of the insert in order to better retain the insert within the surrounding thermoplastic. Thus, from Yoshida's teaching, it would have been obvious to modify Confer et al with circumferential grooves or spurs on the outer surface of his insert in order to better retain and secure the insert within the wall of the drum.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971). As explained in the preceding paragraph, the knowledge is provided by Jones (US 4,664,958), and was not gleaned only from applicant's disclosure.

Applicant also argues that Confer et al cannot be considered a "flow connector", stating that Confer mention that his container wall is fluid tight and that it is desirable to avoid puncturing the wall surfaces of the container. In response, Confer's device is a storage container that is to be connected, via the threaded inserts, to hoses and conduits and coupling, fittings and valves therefor. After molding of the container with the inserts, the wall of container would be punctured or pierced at the location of the inserts. This allows fluid to enter or exit the storage container. Confer's device thus can be considered a "flow connector" as it serves as a connection means to flow fluid.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

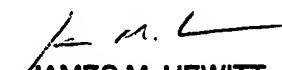
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JAMES M. HEWITT
PRIMARY EXAMINER